Headquarters
U.S. Army Armor Center and Fort Knox
Fort Knox, Kentucky 40121-5000
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*USAARMC Reg 40-5

Medical Services

PREVENTIVE MEDICINE

Summary. This regulation prescribes the Army's Preventive Medicine Program. It establishes practical measures for the prevention and promotion of health and the prevention of disease and injury.

Applicability. This regulation applies to subordinate commands and tenant activities reporting to this Headquarters, and military and civilian personnel, including reserve or national guard personnel or active duty on the installation.

Suggested Improvements. The proponent agency of this regulation is the installation medical authority (Preventive Medicine Service HSXM-PM). Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to the Chief, Preventive Medicine Service (HSXM-PM), USA MEDDAC, Fort Knox, KY 40121-5520.

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*This regulation supersedes USAARMC Reg 40-5, 1 Dec 86.

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Chapter 1

General

1-1. Purpose. To establish comprehensive programs in Disease and Climatic Injury Control, Occupational Health, Community and Family Health, Environmental Quality, Sanitation, and Field Preventive Medicine.

1-2. References. See appendix A.

1-3. Responsibilities. a. Commanders are responsible for all aspects of health and sanitation. Other responsibilities of the commanders are established in AR 40-5, para 1-3 and this regulation.

b. The Director of Health Services, or a representative, is responsible for providing technical guidance and assistance to commanders as operators of the Command Preventive Medicine Program.

Chapter 2

Disease and Climatic Injury Control

Section I

Prevention of Acute Respiratory Disease

2-1. Purpose. To prescribe a standard program of preventive measures and hygienic procedures within the U.S. Army Armor Center (USAARMC) and to reduce the vulnerability of Initial Entry Training (IET) soldiers and permanent party personnel to Acute Respiratory Disease (ARD) including influenza, meningococcal meningitis, and the common cold. Particular emphasis is given to the primary prevention, detection, and early diagnosis of these diseases among IET soldiers.

2-2. General. a. The infectious nature of ARD is most severely felt among IET soldiers undergoing initial training; however, the overall impact of these diseases is a matter of serious concern to all commanders.

b. The principal means available to commanders for maintaining the health of IET soldiers is the provision of adequate nutritious food, adequate rest (an average of 8 hours sleep per each 24 hour period), comfortable, well-ventilated housing, and, for IET soldiers, appropriate limited contact with other personnel.

c. The principal means available to MEDDAC for maintaining the health of IET soldiers is immunizations. Included in the immunizations given to initial entry personnel are vaccines which protect against such respiratory diseases as influenza, meningococcal meningitis, adenovirus, rubella, and rubeola. Other means include evaluation of environmental control at the unit level and providing guidance to commanders concerning preventive measures.

d. The early diagnosis and treatment of influenza and meningitis are essential to prevent deaths from these diseases. Differentiation of the common cold from influenza and meningitis in the early states requires determination by trained medical personnel. Therefore, all IET soldiers who complain of or exhibit symptoms of the common cold, i.e., cough, runny nose, or sore throat, especially if accompanied by headache or fever, will be seen by designated medical personnel at the first opportunity. A "buddy system" will be organized so that each IET soldier will be responsible for checking a "buddy" for evidence of any illness, including ARD.

e. The reporting of the number of cases of ARD and the number of troops at risk (unit strength) is essential to determine and monitor rates of ARD in the training units. The monitoring of these rates provides vital information on the etiology and epidemiology of the various agents that cause ARD and assist in determining necessary preventive actions.

2-3. Responsibilities. a. G-3/Directorate of Plans, Training, and Mobilization (G-3/DPTM).

(1) Coordinate with the training brigades in implementing changes in training schedules, or procedures when required.

(2) Monitor the conduct of unit integrity in all phases of the training program.

b. Directorate of Engineering and Housing (DEH).

(1) Provide technical personnel to assist MEDDAC when specific problems in the DEH area of responsibility are identified.

(2) Ensure that proper housing, heating, and ventilation are maintained.

c. Commander, Reception Battalion.

(1) Ensure that processing of new soldiers at the Reception Battalion is minimal until they have had a minimum of 8 hours of sleep before the start of formal processing.

(2) Ensure subordinate training units adhere to the procedures for prevention of ARD as listed in paragraph 4.

(3) Provide data on unit strength to Preventive Medicine personnel for determination of unit ARD rates.

(4) Ensure that IET soldiers are not released to units of the training brigade until immunizations and other medical processing have been completed (unless cleared by MEDDAC).

d. Training brigade commanders.

(1) Ensure new training brigade officers and noncommissioned officers are given instruction on the prevention, transmission, symptoms, danger, and need for early treatment of ARD.

(2) Ensure subordinate training units adhere to the procedures for prevention of ARD as listed in paragraph 4.

(3) Ensure that IET soldiers are not released to units of the training brigades until immunizations and other medical processing have been completed as prescribed by MEDDAC.

e. Director of Health Services.

(1) Provide overall guidance to the command concerning ARD prevention, to include environmental preventive medicine.

(2) Provide all necessary immunizations and medical processing as determined by the Surgeon General and Health Services Command for IET soldiers processing through the Reception Battalion.

(3) Develop a contingency plan for MEDDAC to handle all aspects of an epidemic of ARD.

(4) Provide weekly monitoring of the rates of ARD in training units and appropriate laboratory testing of ARD patients as directed by Office of the Surgeon General (OTSG).

2-4. Procedures For Prevention of Acute Respiratory Disease. a. Referral of ill soldiers for medical evaluation. IET soldiers will be encouraged to report to sick call for all illnesses, but particularly illnesses suggesting ARD, especially if accompanied by fever and headache. Any IET soldier who has a sudden decrease in the ability to keep up with training requirements will be immediately referred for medical evaluation. Individuals who become ill will be transported to emergency facilities in Ireland Army Community Hospital (IACH) and will not be delayed by reporting to normal sick call.

b. Adherence to unit integrity. Beginning with the Reception Battalion and throughout the training cycle, an effort should be made to minimize the physical contact and mixing of training units (at company level and, if possible, platoon level) in order to minimize the spread of different infectious agents between groups of IET soldiers.

c. Make-up and special immunizations. Units will ensure that any IET soldier who has missed vaccinations during the Reception Battalion processing returns for these immunizations as scheduled by Reception Medical Processing. Units will also ensure that all permanent party personnel receive the annual influenza vaccination as directed by OTSG.

d. Allotment of sufficient barracks sleeping space (72 sq ft) for IET personnel as required by AR 40-5.

e. Coordination between Reception Battalion and training brigades to ensure that each new unit packet is not larger than the billeting space of its programmed barracks.

f. Head-to-foot sleeping arrangement and an average of 8 hours sleep each day for IET soldiers.

g. Maintenance of proper barracks temperature per existing DEH policy. Ventilation in temporary barracks and other buildings without mechanical ventilation used by IET soldiers will be provided by opening two windows per 1,200 square feet. The windows should be diagonally positioned with one window opened up to 2 inches at the top and one window opened up to 2 inches at the bottom. Opening windows by, or that allow cold air to blow directly on, thermostats or radiators should be avoided. Window boards will be kept in place on those windows opened at the bottom. All temporary barracks will have a thermometer in each sleeping bay so temperatures will be readily available. Windows shall be closed when IET soldiers are not present. In each barracks, the Charge of Quarters (CQ) will be expected to have a list indicating the room where thermostats are located and maintain access to those rooms for purposes of inspection. Thermostats will be adjusted to maintain temperatures per existing DEH policy. If temperatures rise or drop from the recommended ranges, an emergency work request should be called in to DEH, phone 4-1171.

h. Daily inspections to determine that clothing is appropriate for weather conditions.

i. Avoidance of excessive exposure during cold, wet weather. Wet clothing should be changed at the earliest possible time in a dry area (i.e., tent, building, etc). Soldiers should have periodic access to warming shelters during cold weather. Physical training should be conducted at such times and in a manner that individuals do not become excessively chilled or wet, especially after the completion of training.

j. Emphasis on personal hygiene, including frequent bathing, regular changes of clothing, and use of handkerchiefs when coughing or sneezing. Frequent hand washing, especially after sneezing, nose blowing and before eating must be emphasized.

k. Damp mopping of barracks floors before buffing.

1. Daily inspections of dining facility personnel and food servers for signs of respiratory disease by the medics assigned or Field Sanitation Team Noncommissioned Officer in Charge (NCOIC) per AR 40-5.

Section II

Prevention of Heat Injury

2-5. General. Heat injury, frequently resulting in hospitalization and occasionally death, continues to occur during the warmer season of the year. All personnel are susceptible to the adverse effects of heat. Successful prevention of these effects depends largely on training both those exposed to heat and those charged with the supervision of such personnel and on following appropriate water intake, work/rest cycle, and activity level for the corresponding heat category.

2-6. Heat Alert Warnings. a. Heat Alert Warnings are based on the Wet Bulb Globe Temperature (WBGT) index which incorporates the heat effects of air temperature, humidity, and radiant energy. Throughout the hot weather season, MEDDAC personnel monitor the WBGT index Monday through Friday from 0730 to 1630 and on weekends and holidays Range Control will monitor and notify G-3/DPTM of changing conditions through the Telephone System. G-3/DPTM then passes this information to subordinate units for necessary action. Personnel may also obtain the current WBGT index by phoning 4-HEAT (phone 4-4328) Monday through Friday. The 4-HEAT line is only a guideline and local commanders will ensure unit readings per para 2-6(b), and 2-7(5).

b. Occasionally, subordinate units do not have ready access to the Heat Alert Warnings disseminated through command channels. Portable instruments are available. All companies are required to have and use at least one instrument during all outdoor activities; more may be necessary if the company routinely splits up during training. If current readings from the disseminated Heat Alert Warning and the instrument are in conflict, the higher index should be used.

2-7. Responsibilities. a. Commanders:

(1) Establish a unit heat injury prevention program.

(2) Conduct a formal heat injury prevention/first aid training session for all permanent party personnel each year before the hot weather season.

(3) Conduct a formal heat injury prevention/first aid training session for all personnel in training status early in each training cycle.

(4) Appoint a heat injury control officer or NCO in each platoon or comparable size unit to coordinate the unit's heat injury prevention program.

(5) Ensure that units, down to platoon level, have access to WBGT index readings through individual unit monitoring of WBGT readings while using the 4-HEAT line as a quality control indicator.

(6) Ensure personnel are familiar with and follow the preventive measures and guidelines listed in paragraph 4 of this chapter and disseminated through command directives.

b. Director, Health Services:

(1) Provide guidance through heat injury prevention training to all units and personnel on the installation. Classes are available upon request from the Environmental Health Section of Preventive Medicine at 624-3246.

(2) Determine the WBGT index during the hot weather season and notify the G-3/DPTM for dissemination through the Telephone System when the WBGT Index reaches the yellow category or higher.

(3) Observe and advise units on the conduct of operations in hot weather.

(4) Report heat injuries through medical channels as directed by AR 40-400, 10 Oct 83, Patient Administration, and Health Services Command.

2-8. Preventive Measures During Periods of Heat Stress. a. Appropriate water intake, work/rest cycle, and activity level for the corresponding heat categories are the most important measures for preventing heat injuries. Table 2-1 lists the recommended guidelines for each of these factors. In the hot weather season, water intake should follow the recommendations listed on table 2-1.

b. Prehydration with 1 quart of water within 30-45 minutes before strenuous activities such as physical training (PT) and road marches ensures replenishment of previous fluid loss and provides

an initial fluid reserve for the activity. Prehydration is important even in early morning activities as there may be significant fluid loss from the previous day.

c. Water is the best drink for fluid replacement. Many flavored beverages have a high sugar content which slows the absorption of the fluid or contain caffeine which acts as a diuretic to lose fluid from the body.

d. A period of acclimatization is necessary even for those in good physical condition in order to perform a maximum amount of strenuous work in the heat. A period of approximately 2 to 3 weeks with progressive degrees of heat exposure and cardiovascular endurance work should be allowed for substantial acclimatization. Due to the peculiar stresses of initial entry training, IET soldiers should not be considered fully acclimatized during their training cycle.

e. Salt loss is increased in hot weather, although the loss diminishes some as the person becomes acclimatized. Eating three balanced meals a day should provide adequate salt intake, even during hot weather. Salt tablets are not to be used as they are so concentrated that they slow fluid absorption and may irritate the stomach.

f. A cool, light meal should be served for lunch. Water should be freely available at each meal. An hour of rest or light activity following lunch should be allowed when possible.

g. Clothing should be loose fitting, especially at the neck, waist, and lower legs to allow circulation of air. Wearing as little clothing as allowable will reduce the amount of heat retained near the body. Occasionally, it may be desirable to dispense with the wearing of web equipment and the work uniform top. Exposed skin, including the head and scalp, should be protected by sunscreen, shade, or clothing (e.g., headgear).

h. There is an increased risk of heat injury to personnel in body armor, chemical protective clothing, or inside armored vehicles. The measured WBGT reading should be increased by 5 degrees when wearing body armor and 10 degrees when wearing chemical protective clothing. For armored vehicles, add an additional 10 degrees to the WBGT reading outside.

i. Modification of the training schedule may be necessary. More strenuous activities should be rescheduled to the cooler portions of the day. Some activities should be reduced, modified, or suspended in certain heat categories (see table 2-1).

Table 2-1

Countermeasures for Heat Injuries

TEMPERATURE INDEX		COUNTERMEASURES		
WBGT Index	HEAT CATEGORY	Water Intake (Qts/Hr)	Work/Rest (Minutes)	Activity
<82°	FREEWHEEL	1/2	50/10	At heat condition below green, intense physical activity may cause heat injury - use caution.
82°-84.9°	GREEN	1/2 - 1	50/10	1. Ample water available for consumption. 2. Water intake and work/rest schedules enforced by cadre. 3. Work uniform altered as considered necessary by the immediate commander (jacket outside of trousers, sleeves unfolded, trousers unbloused and rolled to boot tops, pistols belts worn under jacket). Limit exposure to sun whenever possible. 4. Use discretion in conduct of strenuous exercise for unacclimatized personnel and IETs.
85°-87.9°	YELLOW	1 to 1 1/2	40/20	1-4. Same as Green 1-4. 5. Avoid outdoor classes in direct sunlight. 6. All training requiring strenuous exercise to include marching at standard cadence, is suspended for all personnel with less than three weeks training in hot weather. Extreme caution is taken where physical exertion is required and troops are in direct rays of sun. 7. After second week of hot weather training, activities may be continued at reduced scale as determined by immediate commander or instructor.
88°-89.9°	RED	1 1/2 to 2	30/30	1-4. Same as Green 1-4. 5. Same as Yellow 5. 6. Strenuous exercise curtailed for all IETs and personnel with less than 12 weeks training in hot weather. 7. Avoid unnecessary or prolonged formations or standing at attention.
>90°	BLACK	2	20/40	Physical training and strenuous activity suspended for all personnel except essential non-training operational commitments where the risk of heat casualties may be warranted.

j. Individual susceptibility of a person to heat injury is enhanced by certain conditions. These include previous heat injury, current illness, recent immunizations, alcohol intake, fatigue, obesity, and poor physical condition. IET soldiers should be afforded an average of 8 hours of sleep each day. Personnel who appear ill or complain of illness should be provided appropriate medical care.

Section III

Prevention of Cold Injury

2-9. General. a. Cold injuries have historically been a significant problem for military forces both in combat operations and in training. Seasoned troops, as well as new soldiers, are at risk. Prevention of cold injuries is a command responsibility. A successful program of preventing cold injuries depends largely on the adequate training of each individual soldier in appropriate preventive measures as well as an emphasis on adhering to these measures at each level of command.

b. Cold injury is defined as tissue trauma produced by exposure to cold. For practical purposes, cold injuries may be classified as "freezing" (frostbite) or "nonfreezing" (chilblains, trench foot, immersion foot). Tissue injury is largely due to vascular damage and will be similar in all forms of cold injury. Differentiation of the types of cold injuries is of use mainly as a description of the mode of injury. Table 2-2 describes the mechanism of injury and clinical appearance for each type. Table 2-3 describes the different degrees of severity of cold injuries. Hypothermia may also be classified as a cold injury. Hypothermia results in a lower body core temperature, with or without local tissue trauma.

2-10. Weather Factors and Wind Chill Factor Chart. a. The human body is continually producing and losing heat. As the ambient (air) temperature becomes less, there is a greater loss of tissue heat from exposed skin. Wind also increases the loss of heat by reducing the thin insulating layer of warm air next to the skin. This loss increases as the wind speed increases. Thus, decreasing the air temperature (generally less than 50 degrees F) or increasing the wind speed acts to increase the danger of cold injury to exposed skin. The combined effect of wind and temperature is expressed in the Wind Chill Factor Chart (table 2-4) as an equivalent temperature. This expresses the effective temperature acting upon exposed flesh.

b. Any movement of air past the body has the same cooling effect as wind. This may be produced by walking, running, skiing, or riding in open vehicles. The speed of movement must be considered, in addition to natural wind, when using the Wind Chill Chart.

c. It is emphasized that the wind chill factor is of value in predicting cold injury mainly to exposed flesh. Any clothing or material which stops or reduces the wind will give a degree of protection to the covered area. No attempt should be made to estimate this protection in the use of the Wind Chill Factor Chart. Wet clothing or boots have a much reduced insulating value and will result in heat loss near that of exposed flesh.

d. To use the chart, find the estimated or actual wind speed in the left hand column and the actual temperature in degrees F in the top row. The equivalent temperature is found where these two intersect. The description below the columns indicates the danger of cold injury to exposed flesh. For example, with a wind speed of 10 mph and a temperature of -10 degree F, the equivalent temperature is -33 degree F. This lies within the zone of increasing danger of cold injury, and protective measures should be taken. Trench foot and immersion foot may occur at any point on this chart.

e. Precipitation and humidity can also contribute to heat loss. Moisture, whether from rain, snow, high humidity, or perspiration, decreases the insulating properties of clothing and skin and adds to heat loss.

f. Weather information, including the wind chill factor, can be obtained by contacting Detachment 5, 5th Weather Squadron, United States Air Force (USAF), phone 624-5517, during duty hours or 624-1115 during nonduty hours.

2-11. Responsibilities. a. Commanders:

(1) Establish a unit cold injury prevention program for cadre and personnel in training status.

(2) Conduct a formal cold injury prevention/first-aid training session for all permanent party personnel each year before the cold weather season.

(3) Conduct a formal cold injury prevention/first-aid training session for all personnel in training status early in each training cycle.

(4) Appoint a cold injury control officer or NCO in each platoon or comparable size unit to coordinate the unit's cold injury prevention program.

(5) Ensure adequate clothing and equipment for cold weather is available to all troops.

(6) Ensure that subordinate units are kept informed of weather conditions, including wind chill factor, when planning or conducting training operations.

b. Director, Health Services:

(1) Provide guidance on cold injury prevention training to all units and personnel on the installation.

(2) Observe and advise units on the conduct of operations in cold weather.

(3) Report cold injuries through medical channels as directed by AR 40-400 and Health Services Command.

2-12. Preventive Measures. a. Weather information, including wind chill factor, should be incorporated into the planning or training operations and used when appropriate to modify operations.

b. Cold weather clothing must be available to all troops, and cadre must ensure subordinates wear clothing appropriate for present weather conditions.

c. Loose-fitting clothing in layers provides the best insulation against cold as air is trapped between layers. Layers of clothing can be added or removed depending on weather conditions and activity level. Remove layers as needed to avoid sweating, especially when doing heavy activity.

d. Dry, clean clothing provides the best insulating quality. Wet or dirty clothing should be changed as soon as possible. Perspiration may cause enough wetting of clothing, especially socks, to contribute to cold injury.

e. Restricting or constricting clothing, especially at the ankles and feet, should be avoided. Wearing blousing rubbers, too many pairs of socks, or tight fitting boots may increase the chance of cold injury to the feet by decreasing blood circulation.

f. Fingers, toes, and ears are the most susceptible parts of the body. Fifty to 60 percent of the body's heat loss may be from the head. Special attention should be paid to protecting these areas.

g. Nutritional demands increase in cold weather. All soldiers should eat at least three meals a day. Hot food and beverages should be provided whenever possible.

h. Dehydration is a significant problem during cold weather. Soldiers should drink 2-3 quarts of fluids per day when doing routine work and more as needed when doing strenuous activities. Caffeinated beverages and alcohol should be avoided during extended periods of cold exposure as they cause an increased loss of fluid from the body.

i. Immobility causes decreased heat production and vascular blood flow. Exercise of the arms, legs, and trunk (avoid sweating) and also the fingers, toes, and feet improve heat production and blood flow.

j. The duration of exposure to cold should be kept to the shortest possible time needed to meet the mission. Soldiers should be rotated through warm-up shelters as often as needed according to the degree of cold exposure. Fire barrels are ineffective, and often dangerous, as a means of warming.

k. Precautions against cold injuries are needed even at temperatures above freezing (as high as 50 to 60 degrees F), especially in wet weather.

l. Previous cold injuries increase an individual's risk of subsequent cold injuries, not necessarily involving the part previously injured. Cadre should ensure soldiers with previous cold injuries are identified and extra attention paid to their preventive measures.

m. The buddy system should be used where members of units observe each other for proper preventive measures and evidence of cold injury.

n. The initial warning symptoms of cold injury may only be tingling, stinging, or a dull aching sensation of the exposed part followed by numbness. The skin may briefly appear red and then become pale or waxy. First aid should be initiated as soon as possible. This may range from simple rewarming to evacuation to a hospital.

Table 2-4

WINDCHILL CHART

COOLING POWER OF WIND ON EXPOSED FLESH EXPRESSED AS AN EQUIVALENT TEMPERATURE (UNDER CALM CONDITIONS)

Estimated wind speed (in MPH)	Actual Thermometer Reading (°F.)											
	50	40	30	20	10	0	10	-20	-30	-40	-50	-60
	Equivalent Temperature (°F.)											
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-24	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-124
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-21	-35	-51	-67	-82	-98	-113	-129	-145
40	26	10	-6	-24	-37	-53	-69	-85	-100	-116	-132	-148
	Precaution Zone				Extra Precaution Zone			Extreme Precaution Zone				
(Wind speeds greater than 40 MPH have little additional effect.)	LITTLE DANGER (for properly clothed person). Maximum danger of false sense of security.				INCREASING DANGER Danger from freezing of exposed flesh.			GREAT DANGER				

Trenchfoot and immersion foot may occur at any point on this chart.

Table 2-2

Types of Cold Injuries

1. Nonfreezing Injuries: Can occur at temperatures above freezing, as high as 50 to 60 degree F, usually with high humidity, caused by constriction of blood vessels resulting in lack of oxygen in tissues.

a. Chilblains: Localized reaction usually of the hands, feet, and/or ears resulting from repeated or prolonged intermittent exposure to temperatures above freezing, accompanied by high humidity. Acute effects are demonstrated by initial pallor and blanching. On rewarming, the skin is red, swollen, hot, tender, and itchy. Chronic effects may include blistering, ulcerations, and/or hemorrhagic lesions.

b. Trench foot/Immersion foot: Tissue injury to the feet from prolonged exposure to wet cold. In the ischemic phase the area is cold, swollen, waxy, and blotched with red to blue splotches. The area is flexible to touch and the skin is numb. In the hyperemic stage, the area is red, hot, and swollen. Constant throbbing and burning sensations are experienced. Paresthesia is aggravated by heat and relieved by cold. Blister formation is common.

2. Freezing Injuries: Occur at temperatures below freezing. Caused by ice crystal formation of body fluids which results in cellular damage, dehydration, or death of cells.

Frostbite: Tissue injury to any body part where tissue has actually frozen. General symptoms include an uncomfortable sensation of coldness, followed by numbness. Tingling, stinging, and aching sensations may be present. Skin first turns red, then pale or waxy white. In superficial frostbite (involves only skin and immediate underlying tissue) the skin is flexible and may be freely movable over joints and facial bones. Throbbing, aching, and burning pain may persist for weeks. In deep frostbite (involves skin, and deep tissue layers extending to the bone) the skin is solid to the touch and does not move over joints or bony surfaces. After thawing there is some throbbing and aching which is often followed by a period of numbness. Affected area is red for weeks. Localized itching and excessive sweating may persist for months.

Table 2-3

Severity of Cold Injury

First Degree	Redness and Swelling. After rewarming, the skin becomes blotched, bluish to red, hot and dry. The apparent redness blanches poorly on pressure and reappearance of normal skin color is sluggish or absent. There frequently is intense itching or burning, and a later deep seated ache. The swelling begins within 3 hours and may persist for 10 or more days if the individual remains on duty.
Second Degree	Redness and Blister Formation. Redness, swelling, and burning pain are early indications after rewarming. The skin becomes deep red, with blotched blueness and feels hot and dry to touch. Swelling begins within 2 or 3 hours. Blisters and even hugh vesicles may appear within 6 to 12 hours.
Third Degree	Necrosis (death) of skin and cutaneous tissue. This injury involves whole skin thickness and extends into subsurface tissue leading to ulceration.
Fourth Degree	Complete necrosis (death) and loss of tissue. There is destruction of the entire thickness of the part, including bone, resulting in loss of the injured part.

Chapter 3

Occupational Health Program

Section I

General

3-1. Objectives. The overall Occupational Health Program promotes health and reduces risk of job-related illness and injury to military and Department of Army (DA) civilian personnel. The objectives of the Occupational Health Program are to:

a. Assure that all eligible personnel (military and civilian) are physically, mentally, and psychologically suited to their work at the time of their assignment, and that physical and mental health are monitored to detect early deviations from the optimum.

b. Protect employees against adverse effects of health and safety hazards in the work environment. This includes field operations as well as the industrial workplace.

c. Assure proper medical care and rehabilitation of the occupationally ill and injured.

d. Reduce economic loss caused by physical deficiency, sickness, and injury of civilian employees.

e. Prevent decreased combat readiness caused by occupational illness and injury of military personnel.

3-2. Responsibilities. a. Commanders of all units reporting directly to this headquarters and tenant organizations, and directors/chiefs, staff offices/departments, this headquarters, are responsible for ensuring compliance with the requirements of this regulation, its appendices, and applicable Federal legislation.

b. Commanders/directors assigned to this headquarters and tenant units will provide necessary information and support to the Occupational Health Program, as required by this regulation.

c. The Commander, MEDDAC, will:

(1) Provide occupational health services required by current Federal and military directives/regulations, to authorized military and civilian personnel.

(2) Determine the scope and limitations of medical services, care and preventive measures to be provided by the MEDDAC, based on availability of qualified personnel and resources.

(3) Program resources necessary to provide those occupational health services required by Federal and military directives/regulations.

(4) Ensure that the chiefs and personnel of MEDDAC activities identified in this regulation fulfill their responsibilities in support of established occupational health programs.

(5) Ensure provision of physician support for occupational health services when there is no physician assigned.

(6) Appoint an audiologist to act as the hearing conservation officer and to participate as a member of the Command Occupational Safety and Health Advisory Board (COSHAB) advisory council.

(7) Project the impact of full-scale industrial mobilization on occupational health services and ensure provision of these services through the use of contingency contracts and on expanded mobilization Table of Distribution and Allowances (TDA).

(8) Provide medical/technical design review to Director of Engineering and Housing for all new construction or design.

d. The Chief, Preventive Medicine Service will:

(1) Provide overall technical guidance for the Occupational Health Program.

(2) Initiate, if appropriate, and assist in epidemiologic investigations.

(3) Appoint an individual to act as the industrial hygiene program manager per TB MED 503.

(4) Support the installation asbestos management program per TB Med 513, 15 Dec 86, Guidelines for the Evaluation and Control of Asbestos Exposure.

(5) Provide medical review of Federal Employee Compensation Act claims.

(6) Ensure the following occupational health program elements as a minimum are implemented:

(a) Inventory of chemical, biological, and physical hazards in the work environment of all installation activities.

(b) Job related medical surveillance.

(c) Administrative medical examination.

(d) Employee education about job-related health hazards.

(e) Treatment of occupational illness and injury and emergency treatment of nonoccupational illness and injury.

(f) Hearing conservation.

(g) Occupational vision.

(h) Pregnancy surveillance.

(i) Job-related immunization.

(j) Illness absence monitoring.

(k) Chronic disease surveillance.

(l) Epidemiologic investigations of occupational illness and injury.

(m) Maintenance of occupational health medical and administrative records and reports.

(n) Industrial hygiene surveys, sampling, safety, and health inspections.

(7) Serve as a member of the Installation Safety and Occupational Health (SOH) Advisory Council.

e. The Chief, Occupational Health will:

(1) Implement and manage the Occupational Health Program according to specific installation and health service area needs and resources and requirements of the regulation.

(2) Coordinate with other medical treatment facilities (MTFs), installation staff and outlying clinics to ensure collection, review, and reporting of required occupational health data.

(3) Conduct or coordinate medical surveillance for military and civilian employees potentially exposed to occupational health hazards, and evaluate employees in positions requiring specific standards of physical fitness.

(4) Regularly visit work areas to keep informed about work operations and potential hazards and maintain working relationships with supervisors and employees.

(5) Conduct epidemiologic investigations of actual or suspected occupational illness.

(6) Provide advice and guidance to commanders and other concerned personnel regarding occupational health matters.

(7) Participate in the command installation Occupational Safety and Health Advisory Board (COSHAB) and quality control committee.

(8) Establish a light duty or limited duty program in coordination with the installation commander, safety officer, and personnel officer, to facilitate an early return to work for employees injured on the job.

f. The Industrial Hygiene Manager will:

(1) Develop and update annually industrial hygiene input into the Occupational Health Program document to clearly define goals and objectives in the industrial hygiene area.

(2) Establish and maintain the health hazard information module (HHIM) of the occupational health medical information system (OHMIS).

(3) Develop an industrial hygiene implementation plan for the allocation and application of industrial hygiene resources.

(4) Perform industrial hygiene surveys and sampling of workplaces, provide technical guidance and support for the hazard communication, asbestos abatement, and installation occupational safety and health (OSH) programs, and perform other responsibilities as defined in TB MED 503.

g. The Chief, Department Primary Care and Community Medicine will provide clinical support services and coordinate with the C, Occupational Health to assure provision and reporting of required occupational health services for military and civilian employees.

h. The Chief, Optometry MEDDAC, will serve or appoint an optometrist as the occupational vision officer who will:

(1) Assist OSH personnel in identifying eye hazardous occupations, areas, tasks, or processes and in determining the type of protective eyewear required.

(2) Ensure that verification of prescription and proper fitting of industrial safety spectacles are accomplished.

(3) Ensure that industrial safety spectacles meet current American National Standards Institute (ANSI) Z87.1 criterion.

(4) Assist occupational health personnel in establishing and maintaining a vision screening program for workers in potentially eye hazardous occupations and other vision screening programs when required.

(5) Provide professional vision evaluations and the necessary spectacle corrections for civilian employees referred under the Occupational Vision Program.

(6) Provide technical input and assistance for the Employee Health Hazard Education Program.

i. The Chief, Department of Surgery is responsible for:

(1) Clinical aspects of the Hearing Conservation Program which will be conducted per procedures outlined in section VII.

(2) Clinical aspects of the Occupational Vision Program which will be conducted per procedures described in section VIII.

j. The Chief, Patient Administration Division will provide technical assistance for:

(1) Management of medical records

(2) Coordination of medical statistical reporting

(3) Release or transmittal of requested medical records or information.

k. The Chief, Emergency Medical Services is responsible for:

(1) Providing necessary emergency or initial medical treatment to civilian employees sustaining on-the-job injuries or illnesses. Employees requiring follow-up treatment can elect to be referred to the appropriate MEDDAC specialty clinic or to their private physician for continued treatment.

(2) Providing first-aid or palliative treatment for non-occupational injury or illness to reduce absenteeism and enable the employee to complete the current work shift. Repetitive treatment of nonoccupational disorders and more elaborate diagnostic studies will not be provided by the military medical facilities.

(3) Providing a medical evaluation for the health status of MEDDAC patient care personnel and food service personnel on return to duty after any absence due to illness.

(4) Recommending work limitations when indicated for job-related injuries/illnesses.

(5) Completing required worker's compensation forms for the employees.

l. The MEDDAC Infection Control Officer is responsible for:

(1) Prevention and control of all hospital-associated infections for employees as well as patients.

(2) Initial and continuing education of MTF personnel in the principles and practices of prevention and control of infectious disease with emphasis on the importance of reporting all infections to Occupational Health Services and/or the infection control nurse.

(3) Reporting to Occupational Health Services all patient care personnel who are absent from duty due to illness.

m. The Flight Surgeon is responsible for:

(1) Providing medical care and required examinations of all military personnel in flight status.

(2) Providing required medical examinations to DA civilian air traffic controllers.

(3) Medical investigation of all aircraft accidents.

n. The USAARMC Safety Officer is responsible for:

(1) Identification of hazardous areas/jobs and required protective equipment and other controls.

(2) Initiating and conducting safety programs for the command and/or supervisors.

(3) Reporting and investigation of all occupational injuries or illnesses.

(4) Compiling statistical data on occurrence of occupational injuries/illnesses among military and civilian employees. Significant injuries or fatalities will be reported to C, Occupational Health Services by the next duty day.

(5) Coordination of the COSHAB committee.

(6) Assists supervisors in the instructing and enforcement of safe work measures including use of protective equipment.

(7) Implementation of the Respiratory Protection Program to include fit testing and training.

o. The Civilian Personnel Office (CPO) will:

(1) Provide current status information (by a monthly listing) on the hiring/transfer/retirement/termination of civilian employees to the Occupational Health Services.

(2) Ensure all required forms are completed by recruitment and placement position for new-hire personnel.

(3) Provide administrative information to the Occupational Health Services to include statistical and related personnel data.

(4) Notify Occupational Health Service of employees off 2 weeks or more for job-related injuries/illnesses.

(5) Process worker's compensation claims.

(6) Inprocess all new employees through Occupational Health Service for baseline health evaluations.

(7) Coordinate with the C, Occupational Health Service and safety office to identify all physical stress positions.

(8) Provide Occupational Health Service with adequate supportive data for employees being referred for fitness-for-duty evaluations.

(9) Coordinate with Occupational Health Service to provide supervisors and employees with orientation and training relative to Occupational Health programs.

p. The Director, Directorate of Community and Family Activities shall provide professional assistance as required from the Alcohol and Drug Abuse Prevention and Control Program to authorized DA civilian employees.

q. The G-3/Director, Directorate of Plans, Training, and Mobilization shall conduct the Radiation Protection Program per AR 40-5 and other federal regulations governing the use, possession, transfer and/or disposal of radiation producing devices and/or radioactive materials.

r. The Director, Directorate of Resource Management (DRM) shall provide statistical and related military personnel data required for the Occupation Health Program per AR 600-8, 1 Oct 89, Military Personnel Management.

s. The Director, Directorate of Engineering and Housing will:

(1) Ensure a representative from Preventive Medicine staff is appointed as a member of the Installation Planning Board and the Installation Review Board.

(2) Include Preventive Medicine member for medical/technical review of operational modifications or new design or construction projects to address any potential health hazards.

t. Managers and supervisors of military and civilian employees are responsible for:

(1) Ensuring employees are aware of the Occupational Health Program as described within this regulation and familiarizing new employees with the provisions of the program.

(2) Ensuring employees comply with the standards outlined in this regulation or designated by the Occupational Health Program, MEDDAC, designed to control those hazards inherent to, or aggravated by, occupational and environmental conditions.

(3) Providing health hazard communication through education and training programs to inform their employees of:

(a) Any potential health hazards they may be exposed to while performing their work.

(b) Appropriate protective measures required.

(c) Symptoms of overexposure to the health hazard.

(d) Required first-aid treatment for exposure to the health hazard.

(4) Programming funds necessary for the procurement of safety equipment or materials required in support of the Occupational Health Program.

(5) Notification to Industrial Hygiene about new processes or products implemented or deleted in the work area within 10 working days of the change.

(6) Training of employees in health and safety protective measures.

(7) Enforcement of proper use and maintenance of personal protective equipment.

(8) Prompt referral of employees with completed necessary forms for medical treatment of injuries or illnesses.

(9) Ensuring that job related medical surveillance is completed on a timely basis.

(10) Prompt referral of pregnant employees to the Occupational Health Service or Obstetrics/Gynecology (OB) Clinic, IACH (military) for evaluation in relation to work assignment.

(11) Referring civilian employees to Occupational Health Services for clearance before resuming normal duties for:

(a) Illness absence in excess of 5 days.

(b) Absence due to job related injury/illness.

(c) Illness absence regardless of duration for military and civilian patient care personnel and food service personnel.

(12) Providing civilian and military personnel offices with health and safety information necessary for adequate job classification and placement actions.

u. Employees will:

(1) Follow safe and healthful work practices.

(2) Use personal protective equipment when required.

(3) Make note of and report suspected unsafe or hazardous work situations.

(4) Comply with requirements of the Occupational Health Program.

Section II

Occupational Health Services

3-3. General. This section identifies the Occupational Health Program elements and procedures authorized for military and civilian personnel at this installation and servicing health care areas.

3-4. Medical Examinations/Evaluations.

a. Preplacement and job transfer examinations are required for civilian employees assigned to positions requiring specific physical functional requirements. Those employees not required to have complete physical exams are scheduled for baseline evaluations.

b. Job-related examinations are provided to civilian and military personnel potentially exposed to health hazards in the work place. Termination examinations are required for termination of assignment or employment for all employees included in a periodic job-related medical surveillance program.

c. Fitness-for-duty and disability retirements will be accomplished per FPM Chapter 339.

d. Health maintenance examinations (over 40 years of age) are encouraged as health resources permit.

e. Responsibilities.

(1) The Chief, Preventive Medicine will:

(a) Provide overall technical guidance for the Occupational Health Program.

(b) Review the type, scope, and frequency of examinations required for specific health hazards at the work site and provide medical recommendations based on exposure data, legal requirements, and accepted medical practices.

(c) Provide guidance and consultation to other physicians on occupational health aspects of medical examinations.

(d) Define the parameters to be followed by occupational health nurses regarding health evaluations.

(2) The Chief, Occupational Health Services will:

(a) Maintain a medical surveillance roster and schedule units for job-related periodic examinations for military and civilian personnel working with potential health hazards in their job.

(b) Schedule appointments for preplacement, termination, and any administrative examinations for authorized civilian personnel.

(c) Review the HHIM annually and when a change in operation is reported to determine the scope and frequency of job-related examinations.

(d) Conduct baseline screening evaluations.

(e) Conduct periodic work site visits to keep informed of work operations and for liaison with supervisor and employees.

(f) Coordinate required clinical services and diagnostic studies with IACH or other treatment facilities.

(g) Coordinate worker education and training with Industrial Hygiene, Safety Office, and supervisors or employees.

(3) The Industrial Hygiene Manager, Preventive Medicine, will:

(a) Provide workers education and training upon request with Occupational Health, Safety, and supervisors or employees.

(b) Identify DA civilian and military personnel to be included for Occupational Health services.

(c) Notify Occupational Health Services of unhealthful conditions or imminent danger situations detected at the worksite.

(d) Provide an inventory and any sampling data for all potentially hazardous workplace operations.

(e) Provide written sampling data on each individual with date, SSN, and workplace to Occupational Health Services for inclusion in the medical record.

(f) Provide required periodic feeder reports to Occupational Health Services for inclusion in the Occupational Health Report.

(g) Provide Occupational Health Services with a listing of eye hazardous and noise hazardous areas.

(4) The CPO is responsible for:

(a) Referring pre-employment and/or preplacement candidates to Occupational Health Service before placement in potentially hazardous work areas. Appointment to a job position identified as occupationally hazardous will be subject to completion of the physical examination required for that position.

(b) Completing all required forms for pre-employment/preplacement examinations before to appointment date at Occupational Health Services.

(c) Scheduling all appointments for physical examinations with Occupational Health Services.

(d) Inprocessing all new employees through Occupational Health Service for baseline health evaluation.

(e) Providing Occupational Health Service with supportive data for fitness-for-duty evaluations.

(f) Providing Occupational Health Services with a monthly listing of civilian personnel in hazardous occupations.

(5) The Director, DRM will:

(a) Provide Occupational Health Services with a monthly listing of military personnel working in hazardous occupations.

(b) Refer inprocessing military personnel through Occupational Health Service for determination of diagnostic examinations required for job assignment.

(6) Unit Commanders are responsible for:

(a) Providing Occupational Health Services with a listing of personnel working in potential hazardous jobs.

(b) Completion of designated sections of SF 88, Report of Medical Examination, for personnel requiring periodic medical evaluations.

(c) Referring new personnel to Occupational Health Services for inprocessing.

(7) The Chief, Department Primary Care and Community Medicine (DPCCM) is responsible for:

(a) Providing clinical support for diagnostic evaluation and physical examinations (if physician assistant (PA) not assigned to Preventive Medicine).

(b) Serving as occupational health medical consultant to the occupational health nurses if no physician is available in Preventive Medicine.

3-5. Occupational Health Education.

a. The Chief, Occupational Health Services will:

(1) Provide counseling to employees on health implications related to job exposure or general health maintenance.

(2) Assist/advise the supervisor when requested in presenting the health aspects of job hazards required for hazard communication.

b. The Industrial Hygiene Manager will provide worker education/training with Occupational Health, Safety Office and supervisors upon request.

c. The Chief, Preventive Medicine will provide guidance and consultation services for adverse health problems.

d. The Chief, Department of Surgery will provide support services from physical therapy and occupational therapy for education and training for aspects of job hazards.

e. CPO is responsible for including Occupational Health Services in the new employees orientation and supervisors training course and to notify Occupational Health Services of scheduled sessions.

3-6 Pregnancy Surveillance

a. The Chief, Occupational Health Services will:

(1) Counsel female employees requiring preplacement or periodic evaluations of any potential hazards to reproduction that are present in the work area.

(2) Inform female employees during new employees orientation to report the pregnancy to Occupational Health Service and the supervisor as soon as the pregnancy is known.

(3) Recommend specific job limitations to CPO and employee's supervisor as directed by the physician.

(4) Assess the work area as required for questionable job hazards.

(5) Notify private physicians or the MTF physician of any toxic chemical or hazardous work conditions that could impact on the course of the pregnancy.

b. CPO will attempt to place a pregnant employee in another position if she is medically unable to continue in her present assignment.

c. Commanders/supervisors will:

(1) Refer pregnant employees to Occupational Health Services as soon as the pregnancy is reported.

(2) Accommodate employees work restrictions if applicable.

d. Civilian and military personnel are responsible for:

(1) Reporting the pregnancy to the supervisor and Occupational Health Service as soon as confirmed.

(2) Reporting for scheduled appointments.

(3) Reporting complications during pregnancy to Occupational Health Service and physician.

(4) Adhering to any work restrictions as per physician.

(5) Reporting to Occupational Health Service after return to work from maternity leave for a health evaluation.

e. The Chief, Department of Surgery is responsible for:

(1) Maintaining a list of military personnel attending new OB orientation for Occupational Health Services.

(2) Referral of any military or DA civilian pregnant employee working in a potential health hazard occupation to the Occupational Health Service for follow-up.

f. The Industrial Hygiene Manager will identify work areas or occupations that present potential hazards to reproduction.

3-7. Immunizations and Communicable Disease Control.

a. Chief, Preventive Medicine Service will determine the screening tests and/or immunizations to be given per DA policy, Center for Disease Control (CDC) guidelines and the assessment of a given situation.

b. The Chief, Department of Medicine will provide clinical support services for the administration of necessary immunizations to authorized DA civilian employees.

c. The C, Department of Nursing is responsible for:

(1) Reporting any infectious illnesses incurred by health care providers to Occupational Health Services and Infection Control Nurse.

(2) Coordinating with Occupational Health Services in identifying high risk areas in the MTF.

(3) Referring preplacement applicants to Occupational Health Service for review of communicable/infectious diseases and required diagnostic or screening tests.

(4) Providing education to MTF personnel in the principles and practices for prevention and control of infectious diseases.

(5) Providing education to MTF personnel regarding the proper handling of infectious waste.

d. The C, Occupational Health Services is responsible for:

(1) Conducting the periodic tuberculosis screening program for MEDDAC personnel.

(b) Medical surveillance of food service personnel, patient care personnel, and any other workers who have close contact with people to prevent their working with an infectious disease.

(c) Conducting the Rubella and Rubeola screening program for MEDDAC personnel and child care facilities.

e. The Chief, MEDDAC Personnel will:

(1) Ensure all inprocessing MEDDAC personnel report to Occupational Health Services.

(2) Furnish a monthly list to Occupational Health Services of inprocessing and departing personnel.

3-8. Injury and Illness.

a. Treatment for civilian employees

(1) Treatment of occupational injuries or illness by the MTF for DA civilian employees may range from first aid or minor emergency care to hospitalization, definitive treatment, and rehabilitation, depending upon need and available resources.

(2) Treatment for nonoccupational injuries/illnesses is performed in emergency situations and for first aid or palliative treatment.

(3) First-aid kits - See appendix B

b. Responsibilities.

(1) The C, Occupational Health will:

(a) Refer employees with injuries or illnesses to the MTF or their physician of choice for medical treatment and arrange for follow-up care if required.

(b) Provide supervisors with information requested in order to complete Office of Worker's Compensation Program (OWCP) forms.

(c) Coordinate with the CPO Federal Employees Compensation Act (FECA) administrator on information required for completion of the Occupational Safety and Health Act (OSHA) Log.

(d) Assist the FECA administrator with medical aspects of the FECA program.

(e) Review FECA claims from CPO.

(f) Refer employees off 2 weeks or more to C, Preventive Medicine Service.

(2) The C, Emergency Medical Service, will:

(a) Provide emergency or initial medical treatment to civilian employees sustaining job-related injuries or illnesses.

(b) Provide first aid or palliative treatment or refer to appropriate clinic for nonoccupational injuries or illnesses to reduce absenteeism and enable the employee to complete the work shift.

(c) Complete required workers compensation forms for the employee to include work limitations and duration.

(3) The FECA administrator, CPO will:

(a) Provide the Occupational Health Services a monthly listing of injuries/illnesses.

(b) Notify Occupational Health Services of employees off for 2 weeks or more for a job-related injury.

(c) Provide copies of FECA claims to Occupational Health Services.

(d) Process worker's compensation claims.

(e) Provide statistical data for injuries/FECA claims as required.

(4) The C, Preventive Medicine will:

(a) Evaluate medical records and/or examine employees off 2 weeks or more for job-related injuries.

(b) Conduct epidemiological investigations as required for unusual occurrences.

(5) The C, DPCCM will:

(a) Provide required medical treatment for injured military personnel.

(b) Maintain statistical data on these injuries for Occupational Health Services.

(6) Managers and Supervisors will:

(a) Prepare forms and/or reports required in support of the FECA/Occupational Health Program for all civilian and military occupational injuries/illnesses.

(b) Ensure the following forms are initiated for a reported civilian job-related injury.

(1) DD Form 689, Individual Sick Slip.

(2) CA-16, Authorization for Examination and/or Treatment, three copies, within 4 hours of injury.

(3) CA-1, Federal Employees' Notice of Traumatic Injury and Claim for Continuation of Pay Compensation, three copies.

(c) Refer civilian employees incurring a job-related injury to the Occupational Health Service or MTF for an initial medical evaluation and/or treatment and before return to work if lost time injury.

(7) Employees are responsible for:

(a) Reporting an injury immediately to the supervisor (within 4 hours of injury).

(b) Receiving a medical evaluation for the injury from Occupational Health Service or MTF.

(c) Completion of required OWCP forms

(8) The Safety Manager will:

(a) Investigate job-related injuries and illnesses and report per prescribed directives.

(b) Maintain statistical data on all occupational injuries/illnesses.

(c) Assist the C, Preventive Medicine Service or Occupational Health Service with any epidemiological investigation.

3-9. Illness Absence Monitoring.

a. Supervisors/managers are responsible for:

(1) Referring civilian employees who have been absent due to any illness in excess of 5 days to the Occupational Health Service, 0730-1600, Monday-Friday, for a medical evaluation on return to duty. Those employees working evening/night tours or weekend shifts will report for the evaluation on the next duty day to the Occupational Health Service.

(2) Referring food service personnel and patient care personnel, regardless of duration of absence, to the Occupational Health Service for clearance before resumption of duties. Time spent in the clearance by the Occupational Health Service will be in duty status. Employees not allowed to resume normal duties shall be offered other work.

(3) Accommodating work limitations for job-related injuries/illnesses.

(4) Referring those employees absent due to an occupational injury/illness to the Occupational Health Service before return to normal duty.

b. The Chief, Infection Control Officer, MEDDAC, is responsible for reporting to Occupational Health Service, all patient care personnel absent due to illness.

c. The Chief, Occupational Health Service is responsible for:

(1) Referring the employee to the C, Preventive Medicine for an evaluation if there is any question concerning the individual's ability to return to work.

(2) Consultation with employee's personal physician for additional information as required, for return to work restrictions or health status.

d. The Chief, Emergency Medical Services is responsible for providing a medical evaluation (during nonduty hours of Occupational Health Service) for the health status of MEDDAC patient care personnel and food service personnel on return to duty after any absence due to illness.

3-10. Epidemiologic Investigations.

a. Epidemiological investigations will be conducted:

(1) When an employee reports an unhealthful working condition.

(2) After the occurrence of suspected or proven occupational illnesses.

(3) When excessive numbers of occupational injuries or illnesses at a given work site are identified.

(4) When a situation represents an imminent danger to Army or DA civilian personnel.

b. The Chief, Preventive Medicine Service is responsible for initiating and assisting with the epidemiological investigations.

c. The Chief, Occupational Health Service is responsible for:

(1) Assisting with epidemiological investigations.

(2) Reporting unhealthful working conditions to the Safety Office.

(3) Assisting Safety, C, Preventive Medicine or Industrial Hygiene with work site visits regarding the investigation.

d. The Safety Manager is responsible for:

(1) Investigating suspected or proven occupational illnesses.

(2) Identifying excessive numbers of occupational injuries and investigating for unusual trends.

(3) Reporting situations that represent imminent danger to Army personnel per AR 385-10.

3-11. Chronic Disease or Disability Surveillance.

a. The Chief, Occupational Health Services will:

(1) Medically evaluate the employees work capability to ensure proper job placement.

(2) Identify employees with chronic disease or disabilities by marking the outside of the medical treatment record.

(3) Assist employees with medical problems associated with job placement

b. The CPO will refer all employees with known chronic disease or handicap through Occupational Health Service before job assignment.

3-12. Administrative Records and Reports.

a. These are media used to facilitate the day to day operation of the Occupational Health Service and to collect and reflect statistical, epidemiological, and other information about occupational health programs and activities.

b. Responsibilities.

(1) The C, Occupational Health Service (OHS) is responsible for:

(a) Submitting all required reports regarding occupational health activities.

(b) Coordinating with C, Patient Administration Division to identify and ensure all occupational health reporting requirements are met.

(c) Initiating a medical treatment record for all new employees reporting to OHS.

(d) Ensuring medical record is coded to identify dual status for those civilian employees who are also military medical beneficiaries.

(2) The C, Patient Administration Division is responsible for:

(a) Initiating, maintaining and dispositing of occupational health medical records.

(b) Cross-coding medical records of military medical beneficiaries who are also DA civilian employees.

3-13. Occupational Health Education and Training.

a. Supervisors/managers are responsible for employee education regarding exposures to potential health hazards at the work site.

b. The Safety Manager is responsible for:

(1) Providing support and guidance to the supervisor and/or the employee for education concerning job exposures.

(2) Coordinating and presenting hazard communication requirements.

c. The Industrial Hygiene Manager will provide technical advice and assistance to employees/supervisors concerning potential health hazards, e.g., chemicals, ventilation, noise, etc.

d. The C, Occupational Health Service will:

(1) Assist or advise supervisors on the health aspects of job hazards.

(2) Counsel employees during periodic evaluation as to health hazards of their job.

(4) Brief supervisors during CPO training courses on the purpose and scope of the Occupational Health Program, and the consultation and related services available to them.

e. The CPO will schedule the Occupational Health Services to provide briefings for new employee orientation and supervisor training courses.

3-14. Respiratory Protection Program. a. The Chief, Preventive Medicine Service will be responsible for:

(1) Identifying, in coordination with the Safety Officer, USAARMC, those areas and/or occupations which are potentially respiratory hazardous. An inventory of identified respiratory hazardous areas will be maintained by the Industrial Hygiene Section.

(2) Make recommendations for protective measures and equipment required in those areas identified as respiratory hazardous.

b. The Occupational Health Service will maintain a suspense system for identifying personnel whose occupations are included in the Respiratory Protection Program and coordinate the periodic medical surveillance of these individuals with their supervisors and personnel office.

c. Commanders/supervisors of active duty military personnel and DA civilian personnel will refer personnel entering an area designated as respiratory hazardous to the Occupational Health Service before placement in that work area for medical clearance to wear a respirator.

Section III

Industrial Hygiene

3-15. Objectives. a. Ensure all potential health hazards at Fort Knox are identified and assessed.

b. Provide for systematic evaluation of potentially hazardous operations to ensure the elimination or control of occupational health hazards.

c. Provide for the identification of DA civilian and military personnel who are required to be included in occupational health programs such as:

(1) Respiratory protection.

(2) Hearing conservation.

(3) Occupational vision.

(4) Pregnancy surveillance.

(5) Occupational health education.

(6) Radiation protection.

(7) Other job-related medical surveillance.

3-16. Responsibilities

a. The C, Industrial Hygiene will:

(1) Establish and maintain the HHIM of the OHMIS to include workplace hazards inventories, employee exposures, engineering and personal protective controls, exposure abatement efforts, and documentation of individual exposure histories.

(2) Provide input annually for the occupational health program document to clearly define goals and objectives in the areas of industrial hygiene.

(3) Develop and maintain a current inventory of all operations with potential occupationally health hazards (Health Hazards Information Module - HHIMs).

(4) Establish an Industrial Hygiene Implementation Plan (IHIP) to include:

(a) Annual update of HHIMs.

(b) Annual program service requirements, (e.g, sampling, monitoring, surveys).

(c) Schedule of identified services by priority into the month or quarter they will be accomplished.

(d) Identify those services that should be supported by supporting activities.

(5) Provide technical guidance and support for the hazard communication asbestos abatement, and other installation OSH programs.

(6) Survey worker operations to determine exposure levels associated with task being performed (air samples, noise measurements, etc).

(7) Evaluate operations, using survey data, to determine:

(a) If permissible exposure limits are exceeded.

(b) If changes in work practice, engineering controls, or personal protective equipment can be utilized to reduce exposure levels.

(8) Assign risk assessment codes (RACs) for all operations, exposures and deficient control measures that create a potential for adverse health effects.

(9) Provide a written report to the Installation Safety Manager on the identified health hazards and assigned RACs for inclusion in the installation hazard abatement plan.

(10) Maintain industrial hygiene survey files and data files to include:

(a) Health hazard inventories.

(b) Existing health hazard control measures and recommendations for improvements.

(c) Toxic chemicals used.

(d) Hazardous devices or processes used (usually included in HHIMs).

(e) Ventilation flow rates.

(f) Noise levels.

(g) Process variables.

(h) Employee exposure data.

(11) Provide consultation and technical advice in the planning, design or construction projects of new worksite facilities or operations to ensure potential health hazards are appropriately addressed.

(12) Serve as a member of the Installation Planning and Review Board.

(13) Advise management on the design and proper use of industrial hygiene controls such as respirators, ventilation,

engineering controls, protective clothing, etc., per legal and regulatory guidelines.

(14) Coordinate with Occupational Health Services personnel, Safety and others to investigate special problems and/or employee complaints.

(15) Maintain and calibrate industrial hygiene equipment per Army regulations and manufacturer's specifications.

(16) Provide names of employees requiring respiratory protection to installation safety for the Installation Respiratory Protection Program.

(17) Provide support to the Hearing Conservation Program by:

(a) Conducting annual noise surveys.

(b) Assign RACs to noise hazardous areas.

(c) Identifying exposed personnel.

(d) Recommending noise control measures.

(18) Provide support to the Occupational Vision Program in coordination with Safety Office by:

(a) Identifying eye hazardous areas.

(b) Providing a list of the eye hazardous areas to the Occupational Health Services.

(c) Coordinating with the C, Optometry Clinic for technical guidance if warranted.

(19) Coordinate with managers, supervisors, Safety, Occupational Health Service, and employees to provide job-related education and training to workers upon request.

b. The Installation Safety Officer will:

(1) Identify hazardous operations/jobs and required protective equipment and other controls.

(2) In conjunction with industrial hygiene, identify eye hazardous areas/operations.

(3) Manage the installation hazard abatement plan to include the RACs submitted by industrial hygiene personnel (appendix C).

(4) Coordinate worker education/training with occupational health personnel, industrial hygiene personnel, and supervisors.

(5) Coordinate and manage the installation respiratory protection program.

Section IV

Asbestos Monitoring

3-17. Introduction. Asbestos monitoring is required for military and civilian personnel and on-post family members who are occupationally or nonoccupationally exposed to asbestos.

a. The Installation Commander will establish an asbestos management program per DA guidance and TB MED 513.

b. The Director, DEH will administer the asbestos control program for real property per DA guidance.

c. The CPO is responsible for referring civilian applicants with a potential exposure to asbestos to Occupational Health Services for a preplacement physical examination before job assignment.

d. The Industrial Hygiene Manager, Preventive Medicine upon request from the Director, DEH, will:

(1) Perform monitoring of employee and/or work operation per prescribed laws and regulations to accurately determine the airborne concentration of asbestos.

(2) Perform bulk sampling to determine the presence of asbestos.

(3) Evaluate factors per directing guidelines which influence asbestos fiber release and transport, and the potential for personal exposure to asbestos.

(4) Apply simple, quality "present/absent" or "high/low" ratings to the appropriate determined factors.

(5) Notify affected employees of monitoring results in writing or by posting results in a location centrally accessible to the employees.

(6) Document in writing the employee's representative exposure level or anticipated exposure level to Occupational Health Services for inclusion in employee's medical record.

(7) Establish and maintain records of exposure measurements and/or objective data for exempted operations.

e. The supervisor/manager will:

(1) Initiate engineering controls and work practices per regulatory requirements to achieve compliance with the permissible exposure limit to asbestos for employees.

(2) Refer employees for termination physical examinations.

(3) Initiate an employee training program and document per policy guidelines.

f. The Safety Manager will provide assistance and/or guidance for the installation asbestos control program.

g. The C, Occupational Health Service, will:

(1) Provide preplacement, periodic, and termination physical examinations to include all diagnostic tests for those employees with potential exposure to asbestos or those employees who will wear a negative pressure respirator.

(2) Ensure employees complete the mandatory preplacement and periodic medical questionnaire for asbestos exposure above the action level.

h. The Federal Medical Officer (FMO) completing the physical examination will provide the employee with a written opinion as to the results of the physical exam to include:

(1) Any detected medical conditions that would place the employee at an increased risk of material health impairment from exposure to asbestos.

(2) Recommended limitations for employee or on the use of personal protective equipment.

(3) A statement that the physician has informed the employee of the results of the examination and any medical conditions that may result from asbestos exposure.

i. The C, Radiology will:

(1) Provide a B Reader or Board certified Radiologist trained to read asbestos x-rays for the interpretation and classification of chest roentgenogram.

(2) Record results on required forms.

Section VII

Hearing Conservation

3-18. Purpose. To outline the responsibilities and procedures for the management of a comprehensive hearing conservation program which is designed to prevent noise related hearing loss, and to promote and maintain the health of the command.

3-19. Scope. This regulation is applicable to all military and DA civilian personnel who are routinely exposed to potentially hazardous noise levels. It pertains to all activities and occupations in areas where noise conditions are potentially injurious to hearing.

3-20. Authority. AR 40-5, Preventive Medicine, chapter 5, prescribes a comprehensive Hearing Conservation Program for all Department of the Army military and civilian personnel. Essential features and specific guidelines for Hearing Conservation Programs are presented in DA PAM 40-501, 27 Aug 91, Medical Surveillance and Hearing Conservation.

3-21. Introduction. a. It has been well documented and long recognized that unprotected exposure to high intensity noise can cause permanent hearing loss. Hearing loss secondary to noise exposure results in permanent nerve damage to the inner ear and is usually not recognized by the individual until said hearing loss interferes with the ability to hear and understand speech.

b. In the initial stages, noise caused hearing loss is usually unnoticed because the high frequency range of hearing is affected first. The hearing for speech remains normal. Once the individual begins to experience hearing difficulty, significant damage has already taken place, often resulting in an appreciable disability.

Only through periodic audiometric hearing tests can noise-induced hearing loss be detected in its early stages. The degree of hearing loss occurring for the same duration and intensity of exposure may vary from person to person because of individual susceptibility.

c. More than one-half of all combat arms troops and a significant number of DA civilian employees lose some degree of hearing before completing their military and civil service careers. The exposure of unprotected ears to hazardous noises results in a hearing impaired soldier who cannot readily detect sounds essential to survival in a combat situation (e.g., the sound of footsteps in grass, movements in brush, the clink of metallic objects, and communication via field phones, etc, especially in the presence of background noise). Hearing loss may also require a permanent change of profile which frequently excludes an individual from working in primary military occupational speciality/special skill identifier (MOS/SSI) or assignment, resulting in costly retraining, reclassifying, and disqualification for reenlistment, commissioning, or retention in the Federal Civil Service.

d. Noise-caused hearing loss has been identified as the number one occupational health hazard in the military. Ironically, this disease is virtually 100 percent preventable in noncombat training situations when a strong hearing conservation program is supported at all levels of command.

e. The existence of a noise hazard or noise-caused hearing loss should be suspected when personnel experience any of the following:

(1) Difficulty with speech communication at a distance of 3 feet (1 meter) in the presence of background noise.

(2) Ringing in the ears.

(3) Temporary hearing loss or any difficulty after noise exposure.

(4) A sensation of fullness in the ears.

(5) Hearing speech but not understanding what is being said.

f. The essential elements of the Hearing Conservation Program include:

(1) Identification of all noise-hazardous areas and personnel routinely working in those areas.

(2) If feasible, noise reduction at its source through engineering controls.

(3) Providing a variety of hearing protective devices that have been medically fit, and enforcing their mandatory use.

(4) Providing audiometric hearing tests on all active duty and DA civilian personnel routinely exposed to high intensity noise on an annual basis.

(5) Health education of personnel regarding noise exposure and its effects.

(6) Inspections of noise-hazardous areas and activities to monitor compliance with appropriate regulations.

(7) Supervision and discipline of personnel.

3.22. Responsibilities. Under the provisions of AR 40-5, the Installation Commander is responsible for initiating and maintaining a hearing conservation program following the guidelines as stated in DA PAM 40-501, issue a command emphasis letter (per AR 40-5) endorsing the installation's hearing conservation program, and include hearing conservation as an item of interest in the local command inspection program (per AR 40-5).

a. The installation Medical Authority will:

(1) Ensure that a physician determines the diagnosis of noise-induced hearing loss. (DA PAM 40-501, para 7-5a)

(2) Designate an individual (Audiologist) to act as the Hearing Conservation Officer.

(3) Ensure that noise-exposed personnel receive annual hearing tests, health education, and hearing protective devices per AR 40-5 and DA PAM 40-501.

b. The Aviation Life Support Equipment (ALSE) technicians are responsible for the fitting and the use of the SPH-4 aviator's helmet and will inspect the helmets condition per AR 95-3, 27 Sep 90, Aviation, General Provisions, Training, Standardization, and Resource Management.

c. The Safety Officer (per AR 385-10) will:

(1) Inspect work environments to identify potential noise hazards and refer said worksites to industrial hygiene for evaluation.

(2) Include noise hazard abatement projects in the hazard abatement plan.

d. The Hearing Conservation Officer will:

(1) Manage and coordinate all aspects of the hearing conservation program per AR 40-5 and DA PAM 40-50.

(2) Provide hearing protective devices and the earplug carrying case per DA PAM 40-501 and ensure that these devices are properly fit by medically trained personnel.

(3) Maintain an adequate supply of preformed hearing protective devices.

(4) Ensure that monitoring audiometry is performed per DA PAM 40-501 and USAEHA Technical Guide No. 167.

(5) Promote understanding of the Hearing Conservation Program through health education.

(6) Conduct unannounced inspections of noise hazardous areas for compliance with the hearing conservation program.

(7) Evaluate program participation, quality assurance, and program effectiveness.

(8) Report Significant Threshold Shift (STS) per AR 40-5 and DA PAM 40-501.

e. The Director of Engineering and Housing will:

(1) Fabricate noise hazard "DANGER" signs per AR 385-30 and AR 420-70, 17 Nov 76, Buildings and Structures, when requested by unit commanders/activities.

(2) Implement, whenever feasible, acoustical engineering control measures when exposures to steady state noise exceed the time weighted criteria.

(3) Ensure that DEH employees performing maintenance and repair work or operating noise hazardous equipment use hearing protective devices to prevent hearing loss.

f. The Civilian Personnel Officer will:

(1) Ensure that occupational health is included on inprocessing and outprocessing for new, transferring, or terminating personnel. This alerts the Hearing Conservation Center of the audiometric evaluations required for these personnel.

(2) Include in job descriptions (per AR 385-10) when appropriate, the job requirement to wear personal protective equipment, i.e., hearing protective devices.

(3) Ensure (per AR 385-10) that the following responsibilities are included in a civilian supervisor's performance standards when appropriate.

(a) Enforce the use of hearing protective devices.

(b) Ensure that employees report for mandatory medical examinations, i.e., annual hearing conservation testing.

(4) Inform the Installation Medical Authority (IMA) and safety officer of all workers' compensation claims for hearing loss.

g. The Industrial Hygiene Program Manager, Preventive Medicine Service, will:

(1) Use appropriate calibrated equipment and survey all identified and/or suspected noise-hazardous areas and equipment annually.

(2) Establish a time-weighted average (TWA) for all civilians working in noise-hazardous areas and soldiers working in noise-hazardous industrial type operations.

(3) Maintain a current inventory of all noise-hazardous areas using DD Form 2214 (Noise Survey) until HHIM can accommodate noise data. Provide the Hearing Conservation Center a copy of HHIMs.

(4) Establish risk assessment codes (RACs) per AR 385-10.

(5) Establish appropriate contours and advise unit commanders or supervisors on how to properly post these contours.

(6) Notify civilian personnel officer of noise-hazardous areas for inclusion in job descriptions.

(7) Recommend appropriate hearing equipment for each operation.

h. Unit commanders or supervisors of noise-hazardous areas will:

(1) Appoint a unit hearing conservation manager and prepare an standard operating procedure (SOP) detailing the unit hearing conservation program (Assistance available at Hearing Conservation Center, 624-1218/8453).

(2) Notify the Industrial Hygiene Service, MEDDAC, of any suspected noise hazardous source that has not been properly identified and/or any change in hazardous-noise levels in the unit work areas.

(3) Endorse the command emphasis letter supporting the command hearing conservation program.

(4) Maintain and provide replacement hearing protective devices to all personnel in the unit per AR 385-10. NOTE: (Initial fitting of preformed hearing protective devices must be performed by medically trained personnel).

(5) Require noise-exposed soldiers (per AR 670-1, 20 May 87, Wear and Appearance of Army Uniform and Insigna), to wear earplugs and carry the earplug carrying case as part of the battle dress uniform when appropriate.

(6) Ensure that noise-hazardous areas and equipment are marked with proper warning signs and decals requiring the use of hearing protective devices.

(7) Post DA Poster 40-501A (Occupational Noise Exposure Standard and Hearing Conservation Amendment-29 CFR 1910.95) in noise hazardous workplaces, i.e., motor pools, carpenter shops, etc.

(8) Provide copies of regulations, technical bulletins, and other hearing conservation documents to employees, or their representatives, on request.

(9) Ensure that noise-exposed personnel under their supervision:

(a) Receive their annual hearing test and health education training.

(b) Follow recommendations from audiometric examinations, medical evaluations, and noise surveys.

(c) Are allowed to choose from the appropriate approved hearing protectors and hearing protective devices are worn whenever said personnel are exposed to hazardous noise.

(d) Are notified of their exposure measurements.

(10) Ensure that all soldiers and noise-exposed civilians under their supervision retain a pair of preformed earplugs as an item of individual equipment.

(11) Monitor the use of engineering controls (See DA PAM 40-501, chapter 5 - Engineering Controls).

(12) Refer any personnel under their supervision to the Hearing Conservation Center for any hearing problems or complaints associated with the use of hearing protectors.

(13) Initiate disciplinary action when indicated for said individuals who do not comply with the principles of hearing conservation.

i. Noise-exposed personnel will:

(1) Keep hearing protective devices with them on the job and maintain them in a sanitary and serviceable condition.

(2) Correctly wear approved and properly fitted hearing protectors when exposed to hazardous-noise levels per DA PAM 40-501, Chapter 6 - Hearing protectors.

(3) Report for all scheduled hearing evaluations and health education briefings concerning hearing conservation.

(4) Report any hearing problems or difficulties associated with hearing protectors to their supervisor.

(5) Wear noise dosimeters to evaluate noise exposure, when requested by Industrial Hygiene, Preventive Medicine Service, Ireland Army Community Hospital.

Section VIII

Occupational Vision Program

3-23. Responsibilities. a. All responsibilities identified in the body of this directive apply to this program.

b. The Chief, Optometry Service shall:

(1) Classify all work activities under one of six vision standards developed for this purpose. These standards represent the degree of visual skill desired for efficient job performance.

(2) Coordinate with the installation safety and occupational health personnel to determine occupations requiring industrial safety spectacles.

(3) Conduct a professional clinical vision examination for military and civilian personnel referred by Occupational Health Services for prescription safety glasses.

(4) Ensure that military personnel are provided professional eye care.

(5) Receive completed prescriptions from optometrists/ophthalmologists and order new glasses as appropriate.

(6) Fit DA civilian and military personnel requiring plano and prescription safety glasses.

(7) Coordinate with Preventive Medicine/Industrial Hygiene to conduct lighting surveys as required.

(8) In conjunction with the Installation Safety Manager, conduct surveys to ensure installation and utilization of proper eye safety equipment; eye lavage.

(9) Coordinate with C, Occupational Health Services to conduct glaucoma screening as staffing permits.

c. The Chief, Occupational Health shall:

(1) Screen vision of new employees to determine if the visual standards for their job are met. Refer those personnel not meeting standards to the appropriate source.

(2) Screen vision to determine whether workers possess visual requirements indicated by job analysis to include:

(a) Preplacement and annual eye examinations of personnel employed in occupations with laser, microwave, or high intensity light hazards.

(b) Preplacement and biannual vision screening for workers in all other potentially eye hazardous occupations.

(c) Periodic vision screening, triennially for employees in non eye-hazardous occupations.

(3) Schedule periodic visual screening through unit commanders.

(4) Coordinate with the C, Optometry Service, IACH, to conduct a glaucoma screening program for DA civilian biannually as resources permit.

(5) Report the total number of personnel screened and referred, and number of personnel employed in eye hazardous areas as part of the occupational vision program on DA Form 3076 (Army Occupational Health Report) per AR 40-5.

d. The Chief, Industrial Hygiene shall:

(1) Maintain an inventory of eye hazardous jobs in coordination with safety, and an inventory of personnel employed in eye hazardous jobs. Update the inventory annually.

(2) Conduct lighting surveys as required.

(3) Provide health education programs for the workers with participation of safety personnel and supervisors.

e. The Installation Safety Manager shall:

(1) Conduct, with assistance from industrial hygiene personnel, surveys to determine which jobs and areas are to be classified as "eye hazardous" and provide the results to Occupational Health Service personnel.

(2) Coordinate with the Chief, Optometry Service, and respective supervisors to determine the correct types of protective eye wear required for the specific eye hazard.

(3) Monitor the protective phase of the program, provide posters and signs and make applicable recommendations for improvements.

(4) In conjunction with Optometry Service and Industrial Hygiene, conduct follow-up surveys to ensure the acquisition and utilization of appropriate eye safety equipment; e.g., eye lavage.

(5) Investigate accidents involving eye injuries for cause and effect to recommend the proper preventive measures to be instituted.

f. The Civilian Personnel Officer, shall:

(1) Refer new employees to Occupational Health Service for vision screens with completed vision card before job placement and job transfers. Ensure job standard number is annotated on card.

(2) Coordinate with Occupational Health Service in communication of mass vision screening programs.

(3) Provide placement assistance to civilian employees whose visual acuity does not meet the standards of their job.

(4) Provide written waiver to Occupational Health Service for those employees who can be accommodated for deficiencies in visual acuity standards (e.g., unable to pass color vision).

g. Commanders/Division Chiefs/Supervisors shall:

(1) Coordinate with Occupational Health Service to schedule employees for screening tests.

(2) Assist Optometry Service and Safety Office in selecting the type of protective eye wear required for eye-hazard jobs.

(3) Issue the proper type of safety eye wear to each employee in an eye-hazard position per TB MED 506 and OSHA guidelines.

(4) Forward completed order forms for employees requiring safety glasses.

(5) Enforce the wearing of eye protection and safety discipline.

(6) Brief new personnel on safety devices for eye protection; e.g., how to use the device and the importance of maintaining the eye protection device in a clean and serviceable condition.

(7) Ensure employees are not placed in eye-hazardous jobs without proper eye protection.

(8) Acquire, post and maintain signs and posters stressing eye safety.

(9) Direct personnel requiring prescription safety glasses to Occupational Health Service and also those personnel having unusual difficulties or complaints from the use of their safety glasses.

h. Property Book Officer shall:

(1) For prescription safety glasses:

(a) Prepare DA Form 3161 (Request for Issue or Turn In) in seven copies for employees to hand carry to Optometry Clinic on day of appointment. Note any specific requirements, e.g., side shield, nonconductive frames, etc.

(b) Maintain appropriate records of issue per AR 385-32.

(2) For Plano safety glasses:

(a) Prepare DA Form 3161 (seven copies) for employee to hand carry to Optometry Clinic.

(b) Maintain a stock of all plastic plano safety glasses to provide eye protection over employees personal glasses until safety glasses are received.

(c) Provide all visitors entering eye-hazardous areas with appropriate safety eyewear.

3-24. Procedures to Obtain Safety Glasses:

a. Military personnel requiring prescription safety eyewear will report to the Optometry Clinic, IACH, Bldg. No. 851, between 0730 and 1000, Monday through Friday, with seven copies of DA 3161 (obtain from unit property book officer(PBO), and their health records.

b. Civilian employees requiring Plano (nonprescription) safety glasses shall hand carry seven copies of DA 3161 to Optometry Clinic during normal duty hours.

c. Civilian employees requiring prescription safety lenses must obtain a current eyewear prescription (less than 1 year old) from an optometrist or obtain an appointment through Occupational Health Services to be seen at the Optometry Clinic, IACH. The request for safety glasses is submitted to the PBO for DA 3161 (seven copies). On the day of the appointment, the employee will hand carry the DA 3161 and consult from Occupational Health Service as well as the occupational health record, to the Optometry Clinic.

d. Optometry personnel will transcribe pertinent information on a commercial spectacle order form and retain a copy of the DA 3161 for files. The employee will hand carry the spectacle order form and remaining copies of DA 3161 to the Material Branch, Logistics Division, MEDDAC, for procurement.

e. Each employee will be notified by their supervisor through the PBO to report to the Optometry Clinic for fitting of safety glasses. Upon completion, the employee returns the DA Form 3161 to the PBO.

f. Requests for photo-ray lenses must be submitted with a medical diagnosis for photophobia from an ophthalmologist.

g. Contact lenses shall not be worn in eye-hazardous areas without appropriate covering protective eyewear.

Table 3-2

Use of Emergency Eyewash Fountains

GENERAL. a. The Code of Federal Regulations {29 CFR 1910.151(c)} states as follows: "Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use." This requirement is based on the fact that chemical burns of the eyes need IMMEDIATE first aid attention. Any delay in treatment will generally aggravate the injury.

b. The initial treatment of choice is active mechanical flushing of the eyes with lots of water. Authoritative sources indicate that active irrigation should generally continue for a period of 20-30 minutes. This amount of time is usually adequate for the more serious chemicals, i.e., alkalis and strong acids.

c. Providing 20-30 minutes of eye irrigation requires a considerable volume of water. Based on information available from several emergency eyewash fountain manufacturers, the flow rate in gallons per minute (gpm) is generally 1.5 to 2 gpm for most of the lavage fountains (portable and nonportable); therefore, 20-30 minutes of initial irrigation for the most hazardous chemicals will require 30-60 gallons of water. Portable eye lavage fountains usually have a maximum capacity of 5-10 gallons, allowing for a maximum usefulness of only 6 minutes.

d. Portable eye-wash fountains generally are sealed units which work on a pressurized system. The tanks are pressured by use of a hand pump. The possible loss of pressure requires increased maintenance checks to recharge, if necessary. The unit may fail to function because of a lack of interest in maintenance. Squeeze bottles and other plastic container devices have a water capacity less than the portable pressurized eye fountain. They will often lose water through evaporation and become contaminated because of nonuse and lack of maintenance. They are easily misplaced and may not be available in any emergency.

e. Based on the above considerations, the following guidance is provided on the installation of emergency eyewash systems:

(1) Eyewash squeeze bottles and other such plastic devices are not appropriate emergency eyewash systems and should not be used under any conditions.

(2) In all areas requiring an emergency eyewash capability, every effort will be made to install permanent eye lavage fountains of the type described in DA Pamphlet 385-1, 15 Mar 73, Unit Safety Management, paragraph 11-3f.

(3) No portable eyewash fountains will be permitted in areas where a chemical splash hazard exists and there is a continuous source of clean water available.

(4) Portable eyewash fountains may be allowed in remote areas where no continuous flow of fresh water is available, when the installation of a fresh water system is not economically feasible, and when the hazard to chemical splash is minimal, i.e., in bulk storage areas.

(5) The only portable lavage stations that will be permitted are those delivering a flow rate of 1.5 to 2.0 gpm for a minimum of 20 minutes duration, and capable of irrigating both eyes simultaneously. Lower capacity stations, i.e., those delivering the required flow rate for 5 to 10 minutes may only be allowed if the chemicals involved are only mildly caustic or corrosive. Such a situation may be present at remote fuel terminals or field locations where diluted concentrations of pesticides are dispensed. As another example, remote battery charging locations, where batteries are handled or transported for charging or for the addition of electrolyte or water, should be provided with a permanent emergency eyewash capability. If this is not feasible, and a portable station is selected, it should meet the flow rate/time criteria described above.

Chapter 4

Community and Family Health

4-1. Objectives. To improve the level of health and increase the potential for self-sufficiency for soldiers, their families, and other members of the military community through:

a. Management of the tuberculosis surveillance, detection and control program. All inactive/active cases of tuberculosis on medication are to be referred to the Community Health Nurse at 624-4345/4852.

b. Provision of health information and education to the military community with special emphasis to the active duty population. This includes the Health Risk Appraisal Program (HRA), cholesterol and blood pressure screening, wellness classes, smoking cessation programs, health education classes, and human immunodeficiency virus (HIV) education.

(1) The HRA section offers several services: The Health Risk Appraisal is a computerized lifestyle assessment that can be done on groups or individuals. Commanders are to ensure that all soldiers have had an HRA within the last 3 years per AR 600-63, 17 Nov 89, Army Health Promotion. A unit is done in a two step process. The first step is a questionnaire, blood pressure, and cholesterol screening that is done at the worksite. The results are processed and collated and the second step is a wellness briefing during which individuals receive their computer printouts. Units can be scheduled by calling 624-2524/2748. The unit Commander receives a group report upon completion of the process.

(a) Individuals receive HRAs when they process through one-stop. They are given immediate feedback or scheduled for a wellness briefing at a later date in Building 1002.

(b) Soldiers receiving periodic and over 40 physicals are given the HRA as a part of the physical exam. They report to the HRA office, Building 1002, for their follow-up wellness briefing and HRA results.

(c) HRA also offers cholesterol checks on Wednesday mornings between 0800 and 1200 with appropriate counseling, education and referral.

(d) Civilian employees may schedule HRAs and receive immediate feedback in one-on-one counseling and the necessary documents to participate in health promotion programs.

(e) HRA participates in numerous and varied special events by offering cholesterol and/or blood pressure screening when requested and when scheduling permits.

(2) The HIV Program has the following mission to provide up-to-date and accurate information as part of the training requirements for all active duty soldiers and the entire Army family, and to provide the medical and support services needed by HIV-infected soldiers and their families.

(a) To accomplish this mission, the HIV Program offers several services. HIV/Acquired Immune Deficiency Syndrome (AIDS) Awareness training is mandated by AR 600-110, 11 Mar 88, Identification, Surveillance, and Administration for Personnel Infected with HIV for all active duty soldiers. Commanders are to ensure that their units meet this training requirement. The training is highly recommended for DOD civilians. Training will be provided at the unit/organization by the HIV Nurse Educator as requested. HIV/AIDS training is provided in 1-hour time blocks. Units may schedule classes by calling Tammy Jones at 624-2437/4345 or sending written notice to HSXM-PM-N, ATTN: Tammy Jones. The office is located in Building 1002, Room 112. Classes must be scheduled at least 30 days in advance of requested date.

(b) The HIV Program offers counseling services to any individual who has concerns about HIV disease, workplace concerns, or sexuality/sexual practices. Premarital HIV counseling is offered for people who are getting married in states where counseling is required by state law.

(c) HIV/AIDS Awareness training is offered to the surrounding community through forums, seminars, and classes. Classes and counseling are provided for adults and young people, both military and civilian.

(d) The HIV Program provides needed medical and support services to HIV-infected soldiers. The program provides medical treatment and follow-ups, psychological and social support services for soldiers and family members. The HIV program provides continuity of care and support to enable soldiers to retain maximum performance on active duty as long as possible.

(e) The HIV Program offers a variety of services with emphasis on educating our society about HIV disease and prevention. Classes/training will be provided as requested when scheduling permits.

c. Participation with other health professionals in planning for the discharge of hospitalized patients and in identifying any services such patients may require.

d. Provision of a home visitation program to families who are identified as high risk because of poor coping strategies relating to the health of any family member.

e. Participation as advisor in health matters to the Child Development Center and to nurses serving the dependent schools on post.

f. Participation with other members of the Family Advocacy Case Management Team to provide treatment plans for families who have experienced violence among their members.

g. Smoking (Tobacco) Cessation Programs are offered through this office. Each month a 2-week/4-session Fresh Start Program is available which offers behavior modification techniques, group support and provides a prescription for the nicotine patch for those who are interested. The patch is currently obtainable only at off-post pharmacies at the individual's expense. An expanded 4-week/8-session program that utilizes nicorette gum is also available. Information on these classes can be obtained by calling 624-4345/4852.

4-2. Responsibilities. Commanders of all units reporting directly to this headquarters are responsible for ensuring the services outlined above are made known to their troops.

Chapter 5

Sanitation

Section I

Control of Swimming and Wading Pools

5-1. Responsibilities. a. The Directorate of Health Services, Preventive Medicine Service, will:

(1) Make routine inspections of all pools to ensure that sanitary standards are observed.

(2) Conduct epidemiological investigation of all disease outbreaks associated with operation of pools.

(3) Conduct bacteriological analysis of the pools per TB MED 575, Swimming Pools and Bathing Facilities.

(4) Coordinate the annual pre-opening inspection of swimming and wading pools (see paragraph 5-2 below).

(5) Conduct annual ventilation surveys of powered exhaust systems of the swimming pool chlorinator rooms.

b. The Directorate of Engineering and Housing (DEH) will:

(1) Be responsible for the equipment, supply of water treatment chemicals, and maintenance, repair and improvements of all pools per AR 420-46.

(2) Operate the equipment at Community Recreation Division (CRD) swimming pools and coordinate with DCFA to instruct operators of the CRD wading pools and the Community Operations Division (COD) pools in order to maintain filtration, chlorination, and pH control per TB MED 575.

(3) Change all chlorine cylinders at all COD and CRD pools.

c. The Directorate of Community and Family Activities will:

(1) Control swimmers, clean all facilities, and maintain day-to-day control of pool operations.

(2) Provide lifeguards, lifesaving equipment, and janitorial supplies for all pools per TB MED 575.

(3) Maintain pH, chlorination, and filtration of CRD wading pools and COD pools IAW TB MED 575.

(4) Ensure the Safety Management Office inspects pools and makes recommendations to reduce or eliminate hazards that may cause personal injury.

5-2. Procedures. a. Joint pre-opening inspections will be conducted by the Preventive Medicine Service, DCFA Safety Management Office, DEH, and the DCFA pool operators of all pools. Only pools which satisfactorily pass this inspection will be operated. A minimum of 10 days notice before opening will be given to allow time for coordination, inspection, and corrective actions.

b. All pools will be operated per TB MED 575 unless satisfactory alternatives are authorized by the Environmental Health Section of Preventive Medicine.

Section II

Food Service Sanitation

5-3. Objectives. To ensure a continuing program of food service sanitation on the installation that includes storage, preparation, and serving of food and beverages, food and service sanitation training, epidemiologic investigation of suspected foodborne illness, and adequacy of food service facilities and equipment.

5-4. Responsibilities. a. Responsibilities of the Army Special Staff and field command elements related to the Army Food Service Program are stated in AR 30-1, 1 Jan 85, The Army Food Service Program.

b. Commanders are responsible for ensuring that:

(1) The food service or facility manager, military/civilian, attends the Food Service Sanitation Supervisors Course or its equivalent annually.

(2) Construction, alteration, or modification of food service facilities are accomplished only after the plans and specifications have been reviewed and recommendation furnished by the Director of Health Services. Upon completion of such projects, the food service facility will not begin operations without a satisfactory on-site evaluation by the Preventive Medicine Service.

(3) All facilities operate per TB MED 530, 1 Oct 91 and the Food and Drug Administration guidelines.

c. The Director of Health Services, or a representative, is responsible for:

(1) Ensuring commanders of food service facilities comply with this directive.

(2) Conducting inspections of food service facilities to determine compliance with this directive.

(3) Determining requirements for providing medical examinations of food service personnel.

(4) Providing technical guidance and assisting in presentation of food service sanitation training for non-supervisory personnel.

(5) Coordinating certification training for supervisory personnel.

(6) Reviewing plans, blueprints, and specifications for all new construction, renovation, or modification of existing food service facilities, equipment, and utensils as specified in AR 420-10, 2 Jul 89, Management of Installation DEH.

(7) Conducting epidemiologic investigations of actual or suspected foodborne illness.

(8) Conduct ventilation surveys of kitchen powered exhaust systems.

d. Food service facility managers are responsible for:

(1) Ensuring that all food service personnel under their control are continually trained in the principles of food service sanitation.

(2) Compliance of all food service personnel under their control IAW TB MED 530. Ensure a copy of this bulletin is maintained at each food service facility.

(3) Cleanliness, sanitation, and sanitary maintenance of all food service facilities, equipment, and utensils.

(4) Supervision of employee personal hygiene.

(5) Sanitary storage, preparation, transport, and serving of food.

(6) Proper equipment maintenance and replacement at specified intervals.

(7) Attaining certification in applied food service sanitation.

Section III

Field Preventive Medicine

5-5. Responsibilities. a. The commanders of each company, battery, or similar unit which engages in field training will:

(1) Prepare a field sanitation SOP per FM 21-10-1, 11 Oct 89, Unit Field Sanitation Team, to provide guidance in personal hygiene, communicable disease control, field food service sanitation, insect and rodent control, field water supply, and heat and cold injury prevention.

(2) Appoint a field sanitation team consisting of at least two soldiers, one of whom will be a noncommissioned officer. If medical aidmen are assigned to the unit, they will fulfill the role of field sanitation team after proper training. Personnel appointed to field sanitation team must have at least 6 months of remaining duty with the unit on the date of appointment. FM 21-10-1 should be consulted for additional guidance in the selection of field sanitation team members.

(3) Ensure field sanitation team members are trained by Preventive Medicine personnel in those areas listed in a(1) above per FM 21-10-1.

b. Preventive Medicine Service, MEDDAC, will conduct field sanitation team training, upon request, to assist unit commanders in the training of field sanitation teams. Ensure field sanitation team training includes instruction for use of necessary personal protective equipment.

c. The Director of Health Services is responsible for providing necessary technical assistance to members of field sanitation teams and commanders as needed.

5-6. Scope of Operations. Commanders will use their field sanitation teams as advisors on the subjects outlined in a(1) above, both in garrison and field.

5-7. Equipment. AR 40-5, (table 14-1, and FM 21-10-1) recommends specific equipment and supplies to be maintained by field sanitation teams. These items in the recommended amounts are required to be maintained by each field sanitation team.

Appendix A

References

Related Publications

PL 91-596, 29 Dec 70, Occupational Safety and Health Act

29 CFR 1960, Safety and Health Provisions for Federal Employees

AR 40-3, 15 Feb 85, Medical, Dental, and Veterinary Care

AR 40-4, 1 Jan 80, Army Medical Department Facilities/Activities

AR 40-5, 1 Nov 91, Preventive Medicine

AR 40-14, 15 Mar 82, Control and Recording Procedures for Exposure to Ionizing Radiation and Radioactive Materials

AR 40-562, 7 Oct 88, Immunizations and Chemoplophylaxis

AR 385-10, 23 May 88, Army Safety Program

AR 385-15, Water Safety, 15 Oct 79

AR 385-30, 15 Sep 83, Safety Color Code Markings and Signs

AR 385-32, 31 Oct 85, Protective Clothing and Equipment

AR 385-40, 1 Apr 87, Accident Reporting and Records

AR 420-46, 1 Jul 78, Water and Sewage

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TB MED 282, 21 Jan 70, Anticholinesterase Intoxication: Pathophysiology, Signs, Symptoms, and Management

TB MED 501, 15 Mar 80, Occupational and Environmental Health Hearing Conservation

TB MED 502, 15 Feb 82, Occupational and Environmental Health Respiratory Protection Program

TB MED 503, 25 Feb 85, The Army Industrial Hygiene Program

TB MED 506, 15 Dec 81, Occupational and Environmental Health Occupational Vision

TB MED 507, 25 Jul 80, Occupational and Environmental Health Prevention, Treatment, and Control of Heat Injury

TB MED 530, 15 Dec 82, Occupational and Environmental Health Food Service Sanitation

TB MED 575, 1 Jun 82, Swimming Pools and Bathing Facilities

TB MED 577, 7 Mar 86, Occupational and Environmental Health Sanitary Control and Surveillance of Field Water Supplies

FPM 810, 6 Jan 75, Injury Compensation

Appendix B

First-Aid Kits for Occupational Injuries

1. In general, the placing of first-aid kits in work areas is discouraged. Treatment from first-aid kits may result in inadequate treatment and failure to report occupational illness or injury.

2. There are two work situations where the presence of appropriately supplied first-aid kits may be necessary.

a. When fast-acting, highly toxic chemicals are in use, first-aid kits containing specific treatments and antidotes should be readily available in the work area. All personnel should be trained in the emergency use of such supplies.

b. In remote areas of Fort Knox, first-aid kits should be available and contain equipment and supplies needed to render first aid for life threatening injuries or illnesses. Contents of these kits should be determined by Installation Medical Authority (IMA). Employees working in remote areas should be instructed in how to obtain immediate ambulance service.

3. If IMA determine that first-aid kits are needed, the kits should be assigned to persons trained in first aid who are responsible for the reporting of illness and injury as well as for maintaining the contents of the kits. The locations of such kits and the names of the responsible first aid personnel should be provided the occupational health service to facilitate monitoring of first aid reporting and kit maintenance.

4. Requests for first-aid kits should be submitted to the Commander, MEDDAC, ATTN: Ambulatory Care Committee. The following items will be addressed in the justification section of the request:

a. Why do you feel you need a first-aid kit?

b. How far from the hospital or Troop Medical Clinic (TMC) is your work area?

c. What specific hazards are your personnel exposed to (i.e., toxic chemicals, machiner, etc)?

d. How may injuries, and what type, have occurred in your area in the past year?

e. What kind of first aid equipment do you think is needed?

f. Have you previously requested a first-aid kit from the medical authority?

g. Is anyone in your group trained in first aid?

h. What specifically is this person(s) trained to do?

i. What are the work hours for your area (how many shifts per day)?

Appendix C

Risk Assessment Codes

Risk assessment codes (AR 385-10) quantify risk to personnel employed in a facility/plant/operation. Risk assessment is an expression of potential loss, described in terms of hazard severity, accident probability, and exposure to hazard. Subdefinitions follow:

a. Hazard severity. An assessment of the expected consequence, defined by degree of injury or occupational illneses, that could occur from a hazard. Hazard categories are assigned by Roman numeral according to the following criteria:

I - Death or permanent total disability

II - Permanent partial disability or temporary total disability in excess of 3 months.

III - Lost workday accident/compensable/illness.

IV - First aid or minor supportive medical treatment, or simply violation of standard.

b. Accident probability. An assessment of the likelihood that, given exposure to a hazard, an accident will result. Accident probability is assigned a capital letter according to the following criteria:

A - Likely to occur immediately

B - Probably will occur in time

C - Possible to occur in time

D - Unlikely to occur.

c. Risk Assessment Code. An expression of the risk associated with a hazard that combines the hazard severity, accident probability, and personnel exposure into a single Arabic numeral.

1 - Critical

2 - Serious

3 - Moderate

4 - Minor

5 - Negligible

HAZARD SEVERITY	ACCIDENT PROBABILITY			
	A	B	C	D
I.	1	1	2	3
II	1	2	3	4
III.	2	3	4	5
IV	3	4	5	5

FOR THE COMMANDER:

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Colonel, GS
Garrison Commander

DISTRIBUTION:
A plus
50 - HSXM-PM
5 - ATSB-TDL

CF:
Asst Comdt, USAARMS